## Milesia in North America (Dipt.: Syrphidae).

By Frank M. Hull, Ohio State University, Columbus, Ohio.

Several specimens of a *Milesia*, nearly allied to *virginiensis* Drury, but obviously quite distinct, have been in the writer's collection several years, and have attracted his attention to the genus. The species is close to *virginiensis*, but is distinguished by at least three characters that are constant. The scutellum is almost wholly yellow, and with only a very narrow black line basally. Secondly, they differ in the yellow maculation of the thorax, as described below. Lastly, the black transverse markings of the abdomen, and especially those of the second segment, are considerably narrower than in *virginiensis*. The wings are usually more heavily tinged with brown. The species seems to be slightly more southern in distribution.

It was at first thought that the form might be one of the older names listed in the synonomy of its more common ally. A careful examination of these older descriptions, including such as M. limbipennis Macq., M. ornata Fabr., M. (Sphyxea) fulvifrons Big., etc., fails to reveal any evidence that such is the case. It is rather difficult to obtain any satisfaction from such brief descriptions, but the scutellum of the species is quite distinct, and in the older descriptions, the scutellum where mentioned, is described as in M. virginiensis. A brief description of the form, together with a key to the four better known North American species, and notes on others are given below.

Key to Species of North American Milesia

Milesia scutellata n. sp.

&.—Antennae, face and front, golden yellow. Cheeks yellow,

with a black spot basally, on the orbits. Upper half of front and vertex black; lower half of front and occiput, yellow.

Thorax black, marked with yellow, similarly to virginiensis, but differing as follows: in that species there are two transverse, medianly interrupted, yellow bands on the thorax, the first between the humeri, the second just behind the suture. The median, broken ends of the humeral band are turned down and drawn out acutely to a point, but never continuous with the sutural or second band of the thorax; in scutellata the two bands are broadly connected in the middle, forming thus two U's, their open ends facing outward, laterally. Scutellum almost wholly yellow, with a narrow basal band of black. In virginiensis, some two-thirds of the scutellum, basally, are black.

Black markings of the abdomen similar to that species, but narrower. Legs nearly the same. Wings usually more heavily brownish. A trifle smaller than the average virginiensis.

2.—Similar to the male. Front with a black median stripe.

Type male and five male paratypes, from Mississippi Agricultural and Mechanical College, in the author's collection. Two males and one female, from Florida and North Carolina, in the collection of Dr. R. C. Osburn. One female (allotype), from Louisiana, in the Ohio State University collection.

I have examined over two hundred and fifty specimens of the common form, and among them I find the above ten specimens, all of them quite constant. Williston mentions having a specimen from Carolina, similar to what I have described above. He describes the scutellum and abdomen, although he does not mention the bands of the thorax being connected.

The characters here used by the author have been carefully considered and inasmuch as they form two of the principal characters, by which the European species *crabroniformis* Fabr., and type of the genus, is distinguished, they are considered good. In that species the black of the abdomen is largely replaced by obscure reddish, the front of the female is wholly yellow, etc. *M. bella* Town., of this country, likewise has the bands of the thorax connected, as described.

M. pulchra Will. is really as close to virginiensis, as is scutchlata.

## Milesia profusa Walk.

This species has not been recognized since it was described. The generic reference of the species is even a little doubtful, as many of the older authors were in the habit of making *Milesia* a "dumping ground" for species. It was described as only eleven millimeters in length (I have seen *M. virginiensis* that were scarcely longer than this) and the abdomen black with two yellow spots on each side. It is not included in the key. **Milesia** bella Townsend.

M. bella Town., Annals and Mag. Nat. Hist., xix, p. 142.

M. mida Moody, Ent. News, xvi, p. 138.

Specimens of this species studied, are from Arizona, in the Ohio State University collection. *M. mida* Moody is, according to Professor J. S. Hine, and Moody himself, a synonym of *M. bella*.

Milesia virginiensis Drury.

This species varies considerably in the breadth of the abdomen, nor is the greater breadth to be found in females only. The average size of the fly is about 20 mm.; they frequently attain a length of 24 mm., and I have three specimens of about 14 mm., length, and correspondingly slender. My material is from New Jersey, Pennsylvania, Ohio, Mississippi, Louisiana, Tennessee, and South Carolina. Also recorded from Nebraska, Wisconsin, Virginia, Florida, Georgia, New England and North Carolina.

## Milesia pulchra Will.

Information concerning the species has been drawn from the excellent description and figure to be found in the Biol. Centr. Americana.

## Stilobezzia mallochi and Atrichopogon gilva (Dipt.: Chironomidae.)

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A recent examination of the Ceratopogoninae contained in the National Museum collection brought to light an unnamed specimen that roused my interest. It was readily shown to be conspecific with what Malloch termed *Hartomyia gilva* Coq. This species has been referred to by him first<sup>1</sup> as *Johannseniella*,

<sup>&</sup>lt;sup>1</sup> Bull. III. State Lab. Nat. Hist., vol. X, Article IV, 1914, p. 227.